



Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

DOGM
MINERALS PROGRAM
FILE COPY

July 5, 1990

TO: Minerals Staff

FROM: Holland Shepherd, Reclamation Specialist *HOS*

RE: Meeting with Jumbo and Bureau of Water Pollution Control (BWPC),
Concerning Groundwater Contamination for Heap Leaching Operations,
Drum Mine, M/027/007, Millard County, Utah

I met on June 25, 1990, with individuals from Jumbo Mining Company and the BWPC to discuss the status of the Drum Mine Heap Leach Operation. Mr. Ed King and Mr. Doug Austin represented Jumbo Mining. Mr. Mack Croft and Mr. David Rapp represented the BWPC. Groundwater analyses had turned up two levels of cyanide (.60 and .44 ppm total CN) contamination in the proximity of some of the operator's active heap leach pads, generating some concern from the BWPC's newly formed Groundwater Discharge Program.

The BWPC will probably require cessation of heaps 2 and 6 on October 1, 1990. The operator has asked for an extension, but was not encouraged to count on it by the BWPC staff. Apparently, the leakage is thought to be associated with these currently active heaps.

BWPC has asked the operator to perform further testing in the area, drilling deep wells and testing for cyanide contamination. Better characterization of the groundwater configuration is needed before making a final decision. Jumbo Mining is arguing that the problem arises from older heaps, upgrade from the active ones, operated by Western States Minerals (WSMC) up to 2 - 3 years ago.

BWPC has given Jumbo permission to leach test heaps 7 and 2LG. These heaps were operated by WSMC earlier, but have not been used by Jumbo yet. Their integrity is not certain, so BWPC has allowed Jumbo 60 days to determine their soundness.

Page 2
Jumbo Mining Co.
M/027/007
July 5, 1990

DOGM has told Jumbo that these dumps cannot be leached without assuming reclamation responsibilities. Jumbo committed, at this meeting, to bond and submit appropriate reclamation forms for the 7 and 2LG heaps. Jumbo has, up to this point, called them the responsibility of WSMC. It is probable that a reclamation transfer will have to be made with WSMC, before the heaps can be legally controlled by Jumbo.

Jumbo has submitted a reclamation estimate for heaps 7 & 2LG for Division evaluation. This should be done as soon as possible, to meet time frames Jumbo is working under.

According to BWPC, they have approved Jumbo to leach heaps 7 and 2LG under a full leach process, even though it is questionable that the heap's liners are intact. The operator will add a small amount of KCL to the leach solution as a tracer element to help in determining leakage. The KCL will also be used for testing heaps 2 and 6.

jb
cc: Wayne Hedberg, DOGM
WMN/1-2